

**MEMORANDUM OF UNDERSTANDING
REGARDING THE USE AND MAINTENANCE
OF THE CALIFORNIA WATERSHED MAP**

UPDATE ADDENDA

December 21, 2004

This document serves as an Update to the original MOU (see attached).

Page 1: Purpose

The original MOU establishes responsibilities relating to using, managing, and maintaining the California Watershed Map. This update documents changes to Calwater that are reflected in the current version (CALWATER Version 2.2.1.) A copy of Calwater is attached and incorporated by this reference herein to this MOU. The Calwater Committee has adopted California Interagency Watershed Map of 1999 as the formal title.

Page 1: Intent

The intent of Calwater continues to be improvement of planning and coordination of land management activities on public and private lands by providing a set of agreed upon watersheds boundaries. This update acknowledges the recent federal initiative to refine standardized watershed boundaries nationwide (Watershed Boundary Dataset (WBD); FGDC, 2003). By adopting FGDC guidelines, Calwater will begin the process of conformance with federal standards for watershed delineation and digital, geospatial metadata (FGDC, 1994).

The original MOU documents inter-agency consensus on four levels of watershed sub-divisions. This update documents the California Division of Forestry's (CDF) eventual implementation of two additional levels of watershed sub-division (i.e. super planning watershed and planning watershed).

The added delineations are not intended to modify any existing agreements that may be based on watershed delineations that are different from those defined by the current or previous versions of CalWater.

Page 2: Background and Objectives

Exhibit B of the original MOU provides watershed delineation criteria. This update acknowledges additional criteria as stated under WBD guidelines.

The CalWater committee has agreed to use WBD as guidelines for further Calwater development. Both the Federal and State watershed attributing systems for names and numbers will be continued in future versions of CalWater.

Exhibit C in the original MOU incorporated the procedure used to identify the hierarchy designations of the four levels of watershed subdivision. This update provides an addendum to exhibit C that cross-references WBD watershed sub-divisions with Calwater sub-divisions.

Page 2: Selection and Responsibility of Custodian, Distributor, and Archival Facility

The original MOU stated that the interagency committee members will select the custodian, distributor, and archival facility for CALWATER for three years, after which the committee members may reassess those appointments. This update changes the above protocol to one where the designated role of custodian, distributor, or archival facility will be assigned and revised as needed. Changes to these roles will be noted annually in the CalWater meeting minutes.

Page 3: Terms of MOU

No change.

Page 3: Termination

No Change

EXHIBIT A - Addenda: The history of the CalWater dataset and the Interagency Watershed Mapping Committee can be found on the CalWater web pages:

California Interagency Watershed Mapping Committee: <http://cain.nbii.gov/calwater>

California Spatial Information Library (CaSIL): <http://gis.ca.gov/meta.epl?oid=22175>

Calwater Metadata complies with FGDC standards, available at:

<http://www.fgdc.gov/metadata/metadata.html>

EXHIBIT B - Addenda: WBD watershed delineation guidelines can be found at

<http://www.ncgc.nrcs.usda.gov/products/datasets/watershed/>

EXHIBIT C - Addenda: The original MOU designated four levels of watershed sub-division. The table below is an addendum that shows both the federal (i.e. WBD) and state watershed designations (i.e. Calwater 2.2.1).

Federal WBD Level	Federal Designations	Federal Hydrologic Unit Code	Federal Area (approx.)	State of California Designations	California Area (approx.)
Level 1	Region	2 digit	180,000 sq miles 115,193,577 acres		
Level 2	Sub-region	4 digit	16,844 sq miles 10,779,559 acres	Hydrologic Region	12,735 sq miles 8,150,000 acres
Level 3	Basin	6 digit (formerly "accounting unit")	10,600 sq miles 6,783,622 acres	Hydrologic Units	672 sq miles 430,000 acres
Level 4	Sub-basin	8 digit (formerly "cataloging unit")	703-1,735 sq miles 449,895 – 1,110,338 acres	Hydrologic Areas	244 sq miles 156,000 acres
Level 5	Watershed	10 digit (formerly 11 digit in NRCS)	63-391 sq miles 40,000 to 250,000 acres	Hydrologic Sub-areas	195 sq miles 125,000 acres
Level 6	Sub-watershed	12 digit (formerly 14 digit in NRCS)	16-63 sq miles 10,000 to 40,000 acres	Super Planning Watershed	78 sq miles 50,000 acres
Level 7*	Drainage	14 digit	15 sq miles 10,000 acres	Planning Watersheds	5-16 sq miles 3,000-10,000
Level 8*	Site	16 digit	1 sq mile 650 acres		

* Level 7 and 8 are extensions of the Federal designations for use at the local watershed level.

Distributed To
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